Special Issue: Linguistic distance and crosslinguistic influence in the L2 and L3 acquisition of morphosyntax

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Second Language Research
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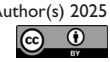

DOI: 10.1177/02676583251389463
journals.sagepub.com/home/slr

Restructuring vs. development: When typological closeness does not facilitate L2 acquisition

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Abstract

This article investigates the role of typological distance and morphosyntactic variation in second language (L2) acquisition. It examines two sets of existing studies that compare learners with typologically different first languages (L1s) acquiring distinct L2 properties: Korean WH-indefinites and English experiential constructions. Both sets of studies test L1 groups where one L1 is typologically close to the L2 with micro-variation in the target property, and the other L1 is typologically distant from the L2. The findings from both studies consistently reveal that L2 acquisition is more challenging when learners must restructure their L1-based interlanguage to accommodate subtle morphosyntactic differences in the L2 (e.g. Japanese speakers learning Korean WH-indefinites or Chinese speakers learning English experiential constructions), a process referred to as 'restructuring'. Conversely, acquisition is relatively easier when learners develop new L2 lexemes without direct L1 equivalents (e.g. English speakers learning Korean WH-indefinites or Korean speakers learning English experiential constructions), termed 'development'. The article argues that the nature of these acquisition tasks, rather than typological distance alone, primarily influences L2 performance and developmental trajectories, highlighting that restructuring poses a greater challenge than development in L2 acquisition. These findings suggest that microvariation between typologically close languages can impede L2 learning, and that L2 acquisition research should carefully consider the specific acquisition tasks involved, moving beyond broad typological comparisons.

Keywords

acquisition task, Chinese, English, experiential constructions, feature reassembly hypothesis, Japanese, Korean, microvariation, typological distance, wh-indefinites

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I Introduction

In second language acquisition, crosslinguistic influence (CLI) is often tested by comparing two or more groups of different first language (L1) speakers in their knowledge of a set of second language (L2) properties. To effectively track potential differences in acquisition outcomes or trajectories, these L1s should be distinct enough from one another. At the same time, they should also share certain similarities or differences concerning the L2 target properties. Thus, a CLI study typically compares languages in two ways: the first comparison is among the different L1s, and the second is between each L1 and L2.

This article examines crosslinguistic influence / L1 transfer, more specifically, from two perspectives: typological distance and morphosyntactic variation. It presents observations from two sets of existing studies that test similar L1 and L2 pairs in terms of typological distance and morphosyntactic variations between them. The relationships among the L1s and the L2 in these studies can be considered in terms of typological distance. One L1 is typologically distant from L2 in terms of the test property and exhibits very different morphosyntactic properties subject to macrovariation. On the other hand, the other L1 is typologically close and shares broadly similar morphosyntactic properties, and yet exhibits subtle differences characterized by microvariation. The findings from these studies suggest that subtle morphosyntactic differences by microvariation pose a significant challenge for acquisition. In comparison, L1–L2 pairs that are typologically distant (under microvariation) and have little morphosyntactic similarity present a relatively easier acquisition task.

Based on the results from these studies, I argue that the difference in L2 performance does not stem directly from the typological relationships between the language pairs. Instead, it arises from the distinct acquisition tasks posed by the macro- and micro-variation relationship in morphosyntactic differences between the L1 and L2. Acquisition becomes more challenging when L2 learners must restructure their L1-based interlanguage lexeme – referred to as 'restructuring' – whereas it is relatively easier when they need to create a new L2 lexeme without an equivalent L1 lexeme – referred to as 'development'. These different tasks lead to varying L2 performance and trajectories in L2 acquisition. To support this proposal, I provide data from two recent and independent sets of L2 studies: Gil et al. (2021b) and Gil and Marsden (2025), on the one hand, and Grillo et al. (2022, under revision), on the other hand. These studies investigate the effect of L1 transfer by testing two different target properties: L2 Korean wh-indefinites and the L2 English experiential construction. The results of these studies are brought together to highlight the role of typological distance and related acquisition tasks, providing a greater impact than each study alone.

1 Typology in second language (L2) and third language (L3)

The role of typology in second language acquisition was considered by Kellerman (1983, 1986). In his seminal work on the language transfer model, 'transferability', he proposes that unmarked properties (language-neutral and common features) in the L1 are more transferable to the L2, while more marked, language-specific properties in the L1 are less

transferable. Within this framework, Kellerman also introduces the notion of psychotypology: learners' perceived typological distance between languages. According to this concept, if L2 learners perceive their L1 to be typologically close to the L2, they are likely to transfer L1 properties even if those properties are highly marked. Though this proposition is intuitively appealing, a fundamental question remains regarding how learners' perceptions of typological distance can be reliably measured to test the predictions of transferability. In addition, the psychological nature of typology based on learners' perception has been disputed, as language transfer operates through unconscious linguistic representation, rather than conscious learners' perception (Rothman, 2015).

More recently, the role of typology has gained more attention in the study of L3/Ln acquisition, focusing on how typological distance can predict language transfer. Different hypotheses have been put forward in this connection, including the Typological Primacy Model (TPM; Rothman, 2013, 2015), the Linguistic Proximity Model (LPM; Westergaard et al., 2017) and the Scalpel Model (Slabakova, 2017). These models explore the underlying principle behind language transfer to L3/Ln, examining whether it is driven by the typological proximity of L1 and L2 to L3 (Rothman, 2013, 2015) or the linguistic closeness of individual properties (Westergaard et al., 2017). For instance, according to TPM, the language (L1 or L2) typologically closer to L3/Ln will transfer as a whole, predicting that either L1 or L2 will transfer at the initial stage of L3. In contrast, the LPM suggests that only specific linguistic properties can transfer from both L1 and L2, depending on their similarity to L3/Ln, and this takes place on a property-by-property basis. This means the transfer can be selective, involving elements from both L1 and L2. The key questions these models address involve the language source of transfer – whether it comes entirely from L1 or L2 (as proposed by the TPM) or from both (as suggested by the LPM) – and whether the transfer is from one language as a whole (as predicted by the TPM) or can be partial (as predicted by the LPM).

In this article I will relate typological distance to the context of L2 acquisition, focusing on how language transfer occurs when comparing two groups of learners whose L1s are typologically different from each other and from L2. Unlike models of L3, which involve multiple prior languages, this article focuses solely on L2 acquisition, in which only one prior language (L1) is involved. As a result, it does not address the language source of transfer (whether language transfer is from L1 or L2, or both). Instead, this article examines how morphosyntactic differences between L1 and L2 result in distinct acquisition tasks. These differences, correlated with typological distance, shape the transfer process. I propose that it is the nature of these acquisition tasks that leads to distinct developmental trajectories and outcomes in L2 interlanguage. While typological distance correlates with morphological variation, it does not directly predict acquisition outcomes or trajectories. For learners whose L1 is typologically close but slightly divergent (i.e. micro-variant) from L2, the primary acquisition task involves 'restructuring' their L1-based interlanguage to accommodate the forms and structures of L2. On the other hand, learners whose L1 is typologically distant from L2 engage in 'developing' entirely new forms and structures of L2, if there is no direct mapping between L1 and L2. In the following section, I will explore how these two distinct acquisition tasks are framed within existing language transfer models, providing context for the two sets of L2 studies presented in this article.

2 Acquisition process, acquisition tasks and the Feature Reassembly Hypothesis

The acquisition tasks we discuss in this article follow two L2 models: the Full Transfer and Full Access model (FTFA; Schwartz and Sprouse, 1996) and the Feature Reassembly Hypothesis (FRH; Lardiere, 2009). The FTFA proposes that the initial representation of L2 interlanguage consists of the fully mature L1 linguistic system. As such, the initial state of interlanguage is defined as Full Transfer (FT). This initial state then goes through restructuring, motivated by the incoming L2 input, and this process proceeds with full access (FA) to the feature inventory in Universal Grammar.

The FRH further articulates this process through two mechanisms: mapping and feature reassembly. In this model, L1 transfer emerges in the mapping process. In the mapping phase, L1 transfer occurs when learners first encounter L2, projecting equivalence between L1 and L2 lexicons. This results in the formation of an L2 interlanguage lexicon. For instance, when a learner is exposed to L2 English and encounters articles like *a* and *the*, they map these to possible equivalents in their L1. When there are direct lexical correspondences between L1 and L2, the interlanguage lexicon incorporates L1-based feature bundles, leading to an L1-like morphosyntactic distribution in the L2 interlanguage. When this system mismatches with incoming L2 input, feature reassembly occurs, which involves reconfiguring the feature specification of the lexeme using available options from UG. Two possible scenarios arise in this process:

- One-to-one mapping: If L1 and L2 lexemes share identical feature bundles, no feature reassembly is needed. However, if the features differ, feature reassembly will occur to align with the L2 input. I refer to this process as ‘restructuring’.
- No direct mapping: If there is no equivalent L1 lexeme for an L2 item, learners bypass the mapping process. They must create a new lexical item or morpheme, selecting relevant features from UG to accommodate the L2 structure. Since there is no pre-existing L1 lexeme or feature bundle to reassemble, this process is simply feature selection, which I refer to as ‘development’.

I will rely on the distinction between restructuring and development to describe the acquisition tasks involved in the two sets of L2 studies presented in this article. I will use this distinction as a general term in second language acquisition, irrespective of any specific L2 model. However, Section V will show that, within the Feature Reassembly Hypothesis (FRH), this distinction can be understood as feature reassembly vs. feature selection and will further discuss the implications of the findings from both sets of studies for the FRH.

II The current article

Building on the acquisition processes and L2 models outlined above, this article presents data from two sets of recent L2 studies to argue that the different acquisition tasks faced by L2 learners are key to predicting their performance (Gil and Marsden, 2025; Gil et al., 2021b) and developmental trajectories (Grillo et al., 2022, under revision). These

acquisition tasks help explain the seemingly puzzling results observed in these studies. Both sets of studies primarily investigate the effect of L1 by comparing two groups of learners whose L1s differ with respect to the L2 target properties. They test hypotheses on L1 transfer based on the morphosyntactic similarities and differences between L1 and L2, predicting that learners whose L1 is more similar to L2 would perform better. However, the results of these studies did not support the predictions and were left unexplained in these articles. I revisit those findings and seek to account for them through the lens of typological distance and acquisition tasks. I argue that while typological distance is related to these acquisition tasks and the resulting outcomes, it is not the primary predictor for the reported results.

Before discussing each set of studies, one key point needs clarification: the concept of typological distance. In this article I adopt the notion of typology from the same perspective as L3 acquisition models, where typological distance is based on linguistic similarities and differences of individual features, including lexical and underlying morphosyntactic properties. This contrasts with the notion of a 'typological family', which groups languages by genealogical relatedness. While languages within the same family often share several linguistic properties, our focus here is on structural typology, namely grouping languages in terms of similar characteristics of a specific grammatical property, rather than language-wide genealogical relationships. As such, typological distance should be understood as the distant or close relationship between groups of languages based on specific grammatical characteristics, whether characterized by broad structural similarities (e.g. SVO vs. SOV, or head-initial vs. head-final) or a particular syntactic phenomenon (e.g. null-subject vs. non-null-subject languages). Further, when considering typological distance, I will distinguish between macrovariation and microvariation. When languages vary in broad structural properties (e.g. SVO vs. SOV) or a particular syntactic phenomenon (e.g. null subject vs. non-null subject), they are considered typologically distant, instantiating macrovariation. When languages share broad structural properties (e.g. SOV, head-final, null subject) but exhibit some further variation, they are considered typologically close, yet instantiating microvariation. The two sets of studies reported in this article present similar relationships between L1s and L2 in terms of the target properties: one L1 is typologically distant from the L2 (macrovariation) and the other is typologically close to the L2 (microvariation). This relative degree in typological distance will also be shown to relate to the different acquisition tasks that we briefly discussed in Section I.3.

This article comprises five sections. Sections III presents the data from Gil et al. (2021b) and Gil and Marsden (2025) and Section IV from Grillo et al. (2022, under revision). Each section begins by introducing the rationale behind the studies and their experimental results, followed by a discussion of the implications for typological distances and L2 acquisition tasks. Section V synthesizes these implications, placing them in a broader context by comparing them with some similar findings from other studies. Finally, Section VI concludes.

III L2 acquisition of Korean WH-indefinites

Gil et al. (2021b) and Gil and Marsden (2025) investigate the extent of L1 transfer by testing L1 English and L1 Japanese-speaking learners on their knowledge of L2 Korean

wh-indefinites.[1] The study adopts the FRH as a model of L1 transfer and predicts that the Japanese L1 group, due to the similarity between Japanese and Korean in terms of wh-indefinites, will outperform the English L1 group, whose L1 lacks an equivalent morphological form to Korean wh-indefinites. However, as the results show, this prediction is not borne out in terms of acquisition outcomes. Let us first examine the target property in Korean, in comparison with its equivalents in Japanese and English.

1 WHs in Korean, Japanese and English

Korean bare WH morphemes serve a double function, acting as wh-question words (WH_Q, henceforth) and wh-indefinites (WH_{Ind}, henceforth). This dual role creates ambiguity when they are used in interrogative sentences, as shown in (1):

(1) Nwu-ka cha-lul masiko isse-yo?
who-NOM tea-ACC drink be.PROG-Q
(i) 'Who is drinking tea?' OR
(ii) 'Is anyone/someone drinking tea?'

Example (1) is ambiguous between a wh-question (i) where the subject *Nwu-ka* can be interpreted as 'who' (WH_Q). It can also be read as a yes–no question (ii), where the subject *Nwu-ka* is interpreted as an existential quantifier 'anyone/someone' (WH_{Ind}). In (2), the same sentence as (1) appears as a declarative form, where the wh-morpheme is only interpreted as an existential quantifier. What teases apart the question and declarative interpretation is the punctuation (the question mark and the full stop) and the intonation.

(2) Nwu-ka cha-lul masiko isse-yo.
who-NOM tea-ACC drink be.PROG-DEC
'Someone (* anyone) is drinking tea.'

Korean WH_{Ind} can appear in various forms. It can stand alone (henceforth, bare WH_{Ind}), as shown in (1) and (2). Alternatively, it can be combined with quantificational affixes such as the disjunction marker *-na* or the conjunctive marker *-to*. These complex WH_{Ind} forms can yield different interpretations, such as those resembling free-choice items or negative concord items.[2] In this study, it is bare WH forms that are chosen as the test property, as they are not explicitly taught, while complex forms are, thereby controlling for possible confounds from explicit knowledge.

Although the indefinite use of WH morphemes is not the most well-known function, it is an 'extremely common phenomenon across the languages of the world' (Haspelmath, 1997: 31). According to Haspelmath, WH_{Ind} appears in 67 out of 100 languages surveyed, spanning various language families, including Indo-European Languages (e.g. German and Dutch), Sino-Tibetan languages (e.g. Chinese and Tibetan), Dravidian languages (e.g. Kannada and Malayalam), and isolate languages such as Korean, Japanese, and Basque. In contrast, English belongs to the type of languages that use WH exclusively for interrogatives and employ separate lexical items for indefinites (e.g. *some*, *any*) (Haspelmath, 1997; Yun, 2014).

Similar to Korean, Japanese WH morphemes also serve a double function: WH_Q and WH_{Ind}. They can also form complex WH_{Ind} constructs like Korean. However, a key difference from Korean is that Japanese WH morphemes cannot stand alone as WH_{Ind}. When used on their own, they function exclusively as WH_Q. For instance, the bare WH, *dare* ('who') can only yield a wh-question reading (3a). To express an existential reading, *dare* requires the addition of a disjunctive marker (*dare-ka*) in a declarative sentence (3b) and a yes–no question (3c):

(3) a. dare-ga kesa anata-o sagashite imashita ka?
who-NOM this.morning you-ACC look.for-PROG be-PAST Q
'Who was looking for you this morning?'

b. dare-ka-ga kesa anata-o sagashite imashita.
who-DISJ-NOM this.morning you-ACC look.for-PROG be-PAST
'Someone was looking for you this morning.'

c. dare-ka-ga kesa anata-o sagashite imashita ka?
who-DISJ-NOM this.morning you-ACC look.for-PROG be-past Q
'Was someone looking for you this morning?'

Therefore, the bare WH in Japanese can only function as WH_Q, while the complex WH can function both as WH_Q and WH_{Ind} (Gil, 2004; Haspelmath, 1997; Zavitnevich-Beaulac, 2005).[3]

The use of WH as WH_{Ind} has received a range of different accounts. One of the widely accepted consensuses has it that WHs in these languages lack an inherent quantificational feature and bear only a variable in their semantics, requiring binding by an overt operator (Cheng, 1997; Choi, 2009; Chung, 2000; Kim, 1989; Nishigauchi, 1990).[4] What sets Japanese apart from Korean is microvariation in the nature of the variable-operator binding relationship. In Japanese, WH morphemes must be bound by an overt operator: either a question marker in C to function as WH_Q (as in 3a) or a quantification particle such as a disjunctive marker to function as an existential WH_{Ind} (as in 3b and 3c). In Korean, on the other hand, bare WH does not always require an overt operator. It can be marked by a question marker (as in 1) with a different intonation, distinguishing between a wh-question and a yes–no question. When no overt operator is present, the WH morpheme defaults to an existential interpretation via existential closure (as in 2). In sum, while Korean and Japanese are typologically close in their broad use of WH morphemes, they exhibit microvariation in their variable-operator binding dependencies.

English, on the other hand, shares very little with Korean and Japanese when it comes to WH_{Ind}. English WH morphemes can only function as WH_Q but cannot serve as WH_{Ind}. Instead, English employs other expressions such as the polarity item *any* (4a–b), where *any* receives an existential reading, and the existential quantifier *some* (4a–d).

(4) a. Is anyone/someone drinking tea?
b. If anyone/someone crosses the line, raise the flag.
c. * Anyone is drinking tea/ someone is drinking tea.
d. * John drank any tea yesterday/John drank some tea yesterday.

While these quantifiers share existential interpretations, they differ in distribution. The polarity item *any* is restricted in its distribution. This distributional restriction has been captured by semantic notions such as non-veridicality (Giannakidou, 1997, 1998) and downward entailments (Ladusaw, 1980, 1996). For instance, Giannakidou (1997, 1998) proposes that *any* can only occur in non-veridical contexts, i.e. the linguistic context that does not refer to a fact (e.g. questions (4a) and conditionals (4b)). This disallows *any* in veridical contexts such as present progressive sentences (4c) and past episodic sentences (4d).

Given the differences across the three languages outlined so far, Gil et al. (2021b) and Gil and Marsden (2025) hypothesize that the availability of WH_{Ind} in Japanese will facilitate the recognition of Korean bare WH as WH_{Ind} in the L1 Japanese group. In contrast, the L1 English group will differ from the L1 Japanese group and potentially lag in recognizing the use of Korean bare WH as WH_{Ind}, since this feature is not present in English WH morphemes.

2 The experiment and results

The study included 49 Japanese-speaking learners and 26 English-speaking learners of Korean. Most participants were tested in Korea while attending Korean language programmes at universities in Seoul. Some L1 English participants were tested in the UK, after spending a year in Korea on a study-abroad programme. The average length of residence in Korea was 7.6 months for the L1 Japanese group and 12.2 months for the L1 English group. Proficiency was measured using a cloze test, where participants were asked to fill in 40 blanks in a 182-word Korean text. Test scores ranged from 15 to 39 out of 40. A score of 30 was set as the threshold to divide into two proficiency levels: intermediate and advanced.[5]

Two experimental tasks were used: an acceptability judgement task (AJT) and a translation task. The test sentences in the AJT only included declarative sentences, while the translation tasks consisted of question sentences (half in yes–no questions and half in wh-questions). It should be noted that all sentences across the two tasks used the same sentential ending *yo*, which can be used for three different types of sentences: yes–no and wh-questions, and declaratives. The use of the same sentential ending 'yo' across all test tokens was important to avoid potential bias in learners' responses due to different sentential endings.

The AJT included 20 grammatical Korean declarative sentences containing WH_{Ind}.[6] This task aims to test whether learners can recognize WH as WH_{Ind} and accept the declarative sentence; learners who interpreted WH only as WH_{Q} were expected to reject it. Table 1 summarizes the test types, with English translations provided for the Korean test tokens for ease of understanding. The test sentences comprised four types of declarative sentences, further divided into two *any* licensing conditions (conditional and negative factive), plus two non-licensing conditions (episodic and non-factive). This design aimed to track the distribution of *any* in the responses from the English-speaking group.

In the translation task,[7] participants were asked to translate 10 Korean questions into their respective L1s,[8] as exemplified by (5):

Table 1. Summary of acceptability judgement task (AJT) test types and test tokens.

Type	Examples	*n*
Episodic	Someone/*Anyone met Chelswu yesterday	5
Conditional	If someone/anyone comes to see me, call me	5
Non-factive	The cook felt that something/*anything was lacking in the food	5
Negative factive	Swumi regretted that she had eaten something/anything late at night	5

Source. Modified from Gil and Marsden, 2025: example 10, p. 31.

(5) Minswu-ka nwukwu-lul cohahay-yo?
Minwu-NOM who-ACC like-Q
'Who does Minswu like?'
'Does Minswu like anyone?' (Gil and Marsden (2025), ex. 11, p.31)

Each sentence was displayed on a screen with accompanying audio playback. The written form in (5) alone does not disambiguate between yes–no and wh-questions, but the accompanying audio recordings are manipulated for either of the question conditions. The results of the translation task were used to corroborate findings from the AJT. If participants accepted the declarative sentences with WH_{Ind} in the AJT, the translation task with question sentences would help determine whether they can differentiate between ambiguous readings: yes–no questions (with lowering intonation) vs. wh-questions (with rising intonation).[9]

Let us now look at the results. Figure 1 shows the result of the AJT, showing the mean accuracy rate for each condition. Only the descriptive statistics are available for the AJT results. Therefore, we compare the advanced levels of the L1 groups as an indicator of the acquisition outcomes for each L1 group. Curved arrows highlight the comparison between the advanced Japanese-speaking learners (JK adv) and English-speaking learners (EK adv) in each declarative condition.

Two noticeable patterns emerge from the results. First, the advanced groups accepted WH in declarative sentences at rates near or above 60%, with the English advanced group generally showing higher acceptance than the Japanese advanced group, except in the conditional condition. Second, the responses from the English advanced groups (EK adv) did not align with the distribution of *any* (which is permissible in conditional and negative-factive conditions, but not in the episodic and non-factive conditions). This suggests that the predicted advantage for the Japanese group did not materialize, and one possible mapping to *any* in the English group was not observed. We will return to this point in the discussion of the results.

In the translation task, the learner participants were asked to translate each question sentence into their L1, with sentences presented both in written and oral formats. The Korean participants served as a control group and completed a modified version consisting of a multiple-choice task, since the translation task was not suitable for this group. For each question, they were asked to select one of three response options (yes–no, NP,

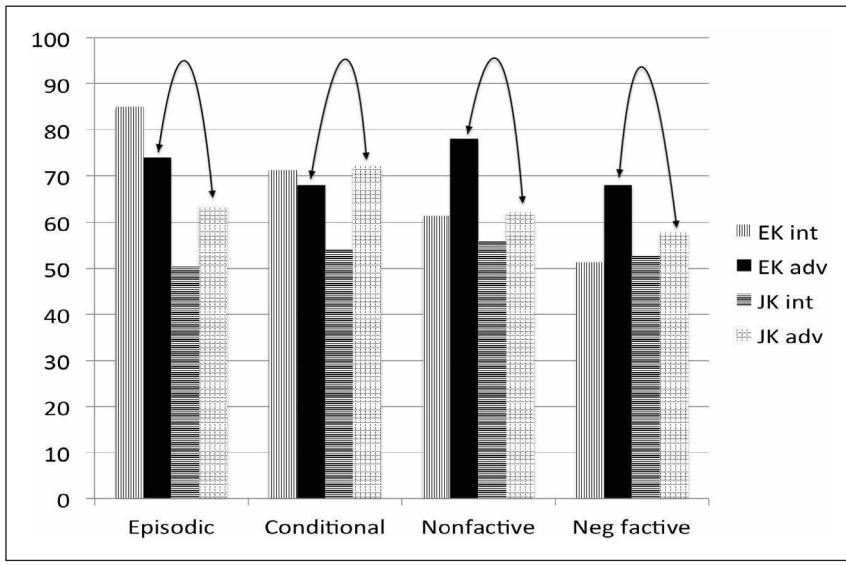

Figure 1. Results of acceptability judgement task (accuracy rates).
Notes. EK adv = advanced English-speaking learners; EK int = intermediate English-speaking learners; JK adv = advanced Japanese-speaking learners; JK int = intermediate Japanese-speaking learners.
Source. Adopted from Gil and Marsden, 2025: example 12, p. 32.

Table 2. Results of translation task for yes–no question condition.

		Responses to yes–no question intonation		
	First language	WH	Yes–no (target response)	Declarative
Second language learner group	Japanese	88.98	11.02	0.00
	English	61.76	37.06	0.00
Control group	Korean	1.05	85.84	12.11

Source. Adopted from Gil et al., (2021b): figure 2, p. 352.

or Really?) as the most appropriate response. This task allowed for the elicitation of Korean speakers' interpretations of the given question sentences. For example, selecting 'yes or no' indicated interpretation as a yes–no question, 'NP' as a wh-question, and 'Really' as a declarative statement. Although the recorded sentences were controlled for intonation to facilitate the interpretation of yes–no and wh-questions, the declarative option was also included because it represents a possible interpretation of bare WH constructions in Korean.

Tables 2 and 3 present the response patterns for each condition (yes–no and wh conditions) across the learner groups and the control group. Since there were minimal differences between the two proficiency levels within each L1 group for both conditions, Gil

Table 3. Results of translation task in the WH question condition.

		Responses to wh-question intonation		
	First language	WH (target response)	Yes–no	Declarative
Second language learner group	Japanese	85.71	1.63	9.80
	English	51.75	7.06	41.18
Control group	Korean	70.53	3.68	25.79

Source. Adopted from Gil et al., 2021b, figure 1, p. 351.

et al. (2021b) combined the results of both proficiency levels for each L1 group. First, consider Table 2 that compares the interpretation response rates for each group in the yes–no question condition.

First, the Korean control group showed a clear preference (~86%) for the target yes–no question interpretation, as expected. However, unexpectedly, they also chose the non-target declarative interpretation at ~12%. We will return to this after we discuss the results in both conditions. The responses of the L2 groups differed significantly. The Japanese group showed a reverse pattern to the Korean control group. The majority of their translations (~89%) were non-target wh-questions, while only ~11% were target yes–no questions. This strongly suggests that the Japanese group does not recognize the existential use of WH in Korean question sentences. On the other hand, the English group showed a more varied pattern. Like the Japanese group, the English group also provided non-target wh-question translations (~62%), though at a much lower rate than the Japanese group. Unlike the Japanese counterpart, however, they showed an indication that they recognize the existential use of WH in Korean question sentences, with ~37% target yes–no translations. This suggests that they may not be able to fully discriminate between the different uses of WH based solely on intonation. Notably, the existential interpretation of Korean WH was observed in the English group, but not in the Japanese group, despite Japanese also allowing WH_{Ind}, like Korean.

Let us now turn to the wh-question condition. An interesting pattern also emerged in the wh-question results, as shown in Table 3. First, the Korean control group showed a categorical preference for the target wh-question interpretation (~71%) over the non-target yes–no question (~4%) interpretations. However, unexpectedly and similarly in the yes–no condition, they also chose the declarative interpretation, but at a much higher rate (~26%) than in the yes–no condition. Combining both conditions, the Korean control group appears to allow declarative interpretations in both question conditions to some extent, but much more so in the wh-question condition.

In the learner groups, the Japanese group showed a clear preference for the target wh-question interpretation (~86%) and very little preference for the yes–no question (~7%). At the same time, their translations included declaratives at ~10%. For the English group, the responses were divided between the target wh-question (~52%) and the declarative sentence (~41%), with the yes–no question appearing only marginally (~7%).

To investigate the effect of L1, Gil et al. (2021b)[10] ran a mixed-effects logistic regression analysis examining the relationship between condition (yes–no and wh-questions) and L1 group. Translation responses were binary-coded, either correct or incorrect, for each condition, with all declarative responses categorized as incorrect. The results revealed a significant interaction of condition and L1 group, confirming that the difference observed between the English and Japanese groups in Tables 2 and 3 was statistically significant.

An emerging picture from the results above indicates two critical observations. First, the AJT results suggest that both groups tend to accept Korean bare WH in declarative sentences, with the English group showing more acceptance than the Japanese group most of the time. This is unexpected given that English does not use WH as an existential quantifier, and yet it seems to be more perceptible to the English group. Secondly, in the translation task, the Japanese group allowed wh-question interpretations almost exclusively, both for wh- and yes–no question types. This suggests that even though Japanese can use WH as an existential quantifier, this L1 morphological similarity does not help in recognizing the existential interpretation of Korean bare WH in question sentences. The English group showed an indication of recognizing the existential use of Korean WH, as they misinterpreted some of the wh-questions as declaratives. This is not a target response. However, Gil et al. (2021b) suggest that since the Korean control group also accepts the declarative interpretation, the use of declarative translation in the learner group, while initially unexpected, is a valid target option. This suggests that the English group is more accepting of the use of WH_{Ind} for Korean bare WH than the Japanese group. Therefore, the predicted advantage for the L1 Japanese group, based on their shared morphological paradigm with Korean, is not supported by the results.

3 Implications for microvariation and acquisition tasks

These studies use the results to support a strict lexical mapping between L1 and L2, based on morphological form. Specifically, Japanese bare WHs are only used as WH_{Q}, and this strict lexical mapping between Korean and Japanese bare WHs leads the L1 Japanese group to interpret the bare Korean WH as WH_{Q}. This explains their difficulty in recognizing the use of bare WH as WH_{Ind}. However, the strict lexical mapping account does not fully explain the results of the L1 English group. If the same mapping applied, the L1 English learners might also map Korean WH to their L1 counterpart, English WH_{Q}. When they encounter Korean bare WH outside wh-questions, two possibilities will arise: they either reassemble features from English WH to accommodate Korean WH_{Ind}, or they explore different routes in mapping by function, linking Korean bare WH to existential quantifiers such as *any* and *some*. Within the results presented above, the mapping to 'any' can be ruled out as the AJT results of the English group do not mirror the negative polarity item (NPI) distribution of *any*. If the mapping is to *some*, then it is not explained why in the translation task, their target interpretations in the yes–no question condition only remain at ~37%. What is clear, then, is that the L1 English group demonstrates better recognition of WH_{Ind} than the Japanese group, and morphological similarities and differences between the L1 and L2 systems alone cannot fully account for this performance difference.

At this point, a closer examination of the microvariation between Korean and Japanese is necessary.[11] For languages that use WH as WH_{Ind}, Haspelmath (1997) divides them into two groups based on how their indefinite readings are licensed. In one group, WH is morphologically unmarked, and linguistic environments determine its interpretation; one such language is Mandarin Chinese. In the other group, WH combines with a quantification affix to receive different interpretations, as is the case in Japanese. Korean WH is a hybrid: it can not only take a bare form like Mandarin Chinese, but it also combines with a quantification affix like Japanese.

In Section III.1, we have seen that Korean and Japanese WH lack inherent quantificational force. To receive an interpretation, they must be bound by an operator. In Korean, the WH in yes–no questions can receive an existential reading when bound by the question marker 'yo' (1i) in the CP. In contrast, in Japanese, the existential reading is only possible when WH is combined with the disjunction maker *ka* (as in *dare-ka* (3c)), meaning it must be bound by *ka* in the local domain, DP. Therefore, for Japanese bare WH to take on an existential reading, operator binding must be resolved within the local domain DP with the help of the disjunction marker *ka*. In Korean, however, bare WH can seek the operator over a long distance, within CP. Let us call a feature responsible for the local operator-variable binding in Japanese F. In the context of the L2 acquisition of Korean WH_{Ind}, the acquisition process can be schematized as below.[12]

(6)	L1 Japanese →	L1 Japanse–L2	Korean interlanguage →	L2 Korean
	(i) $[x, F]_{WH}$	(ii) $[x, F]_{WH}$ → [mapping]	$[x, F]_{WH}$ [feature reassembly]	(iii)$[x]$

When L1 Japanese learners encounter Korean bare WH, they initially map it to the Japanese bare WH (6ii), retaining the feature set from Japanese that consists of variable (x) and F. Without a quantificational marker like *ka* within its DP, but on noticing the question marker at the end of the sentence (CP), they tend to interpret it as a wh-question, following the pattern found in Japanese (as shown in (3a)). However, this is not the target interpretation for the Korean bare WH in yes–no questions. When their interpretation conflicts with the L2 input, it triggers the process of feature reassembly. In this case, the feature reassembly process would involve deleting the feature (denoted by F in 6ii) responsible for the local variable binding within DPs, a feature specific to Japanese WH_{Ind}. This deletion would enable long-distance variable binding within the CP domain as required in L2 Korean. However, the results show that this acquisition task is a challenge for L1 Japanese learners. Their response rate for the target existential reading was consistently low, indicating resistance to the feature reassembly process. This difficulty is even more pronounced when compared to the L1 English group.

We have seen that English does not belong to the group of languages that use WH as indefinites (WH_{Ind}); in English, WH elements function only as interrogatives,[13] but not as indefinites. However, English has other existential quantifiers, *any* and *some*, which have interpretations similar to Korean WH_{Ind}. Given this, there are several mapping possibilities in L1-English–L2-Korean interlanguage[14]:

(7) Mapping from L2 Korean bare WH to:
(i) L1 English interrogative WH
(ii) L1 English existential quantifiers *any* or *some*

The first mapping (7i) must be followed by a process of feature reassembly. In English, WH has an uninterpretable Q feature, an interpretable wh feature and a variable: [wh, *u*Q, *x*]. This feature set enters into a checking relation with corresponding features in CP. This triggers wh-movement in English. However, in the case of L2 Korean interlanguage, these features must undergo reassembly. This involves the deletion of [wh] and [*u*Q] features, leaving only the variable [*x*], the feature set WH in Korean.[15] For the mapping to English, *any* or *some* as shown in (6ii), two processes are required. First, the mapping to *any* must be followed by feature reassembly, during which the feature responsible for polarity sensitivity is deleted, as Korean WH is not polarity-sensitive. Second, the mapping to *some* does not require feature reassembly as both *some* and Korean WH share a common variable, *x*.[16]

Putting all of this together, the L1 Japanese and L1 English groups encounter distinct acquisition tasks. The L1 English group faces multiple mapping possibilities, which lead to varied acquisition tasks related to feature reassembly. Despite these complexities, their knowledge of Korean WH_{Ind} appears to develop earlier than that of the L1 Japanese group, whose acquisition task involves only one mapping possibility. Interestingly, the typological similarity between the WH morphemes in Japanese and Korean does not seem to facilitate a straightforward learning path for the L1 Japanese group. Instead, the subtle differences between these languages – microvariation – seem to present a greater challenge, particularly in reassembling features that are influenced by local and long-distance operator binding differences in L2 Korean WH_{Ind}. From this, we tentatively conclude that restructuring interlanguage to accommodate microvariation imposes a greater challenge when both L1 and L2 are subject to such variations, as seen in the case of Japanese and Korean.

An intriguing aspect of the results involves the L1 English speakers. Although they seem to produce WH_{Ind} correctly in declarative sentences despite the differences from their native language, they fail to recognize its use in yes–no questions. This suggests a lack of sensitivity to the distinct prosodic patterns that differentiate wh- and yes–no questions in Korean. This observation introduces additional complexity to the relationship between macro and micro variation in acquisition tasks, as outlined in our previous discussion. To better examine the role of microvariation and the challenges it poses to the restructuring of interlanguage, we turn to a different study, Grillo et al. (2022, under revision). In this study, one L1 involves microvariation, while the other L1 lacks any equivalent structure to the L2 target item, and therefore has no corresponding mapping relation. In addition, unlike the study of L2 Korean wh-indefinites, this study presents a fuller picture of L2 development across different proficiency levels, which allows an observation on acquisition trajectories.

IV Restructuring vs. development: L2 English experiential constructions

Grillo et al. (2022, under revision) compare L1 Chinese-speaking learners with L1 Korean-speaking learners in their knowledge of L2 English experiential constructions.

The two groups are tested on their knowledge of the polarity sensitivity of *ever*, an experiential marker specific to English experientials (Gil et al., 2021a). A preview of the results reveals that, despite linguistic similarities, the L1 Chinese group does not discern the grammaticality of sentences containing the experiential marker, *ever*. In contrast, the L1 Korean group is shown to be able to. Moreover, the two groups exhibit markedly different acquisition trajectories as shown by development across the different proficiency levels. We will first outline the relevant properties of three languages, followed by a discussion of the experiment and results. Finally, we will consider the implications of these findings for typological distance and the associated acquisition tasks.

1 Experiential constructions in English, Chinese and Korean

English and Chinese both instantiate experiential expressions within their aspectual systems. In English, the present perfect form is most commonly used:

(8) John has been to London.

The universal polarity item, *ever*, can enforce the meaning of experience and is restricted to polarity environments, as shown in (9a) and (9b). This distributional restriction rules out *ever* in affirmative declarative sentences as in (9c):

(9) a. John has not ever been to London. [negation]
b. Has John ever been to London? [question]
c. * John has ever been to London. [affirmative declarative]

Like English, Chinese experientials employ an aspectual system, using a dedicated morphological aspectual marker of experience, *guo* (10a). However, unlike English *ever*, *guo* is not polarity sensitive and is not subject to any distributional restrictions. For instance, it can occur in polarity environments such as negation (10a). At the same time, it can also appear in non-polarity environments such as affirmative declaratives (10b):

(10) a. Wo mei qu-guo Beijing. [negation]
I NEG go-EXP.PERF Beijing
'I have not ever been to Beijing.'
b. Wo qu-guo Beijing. [affirmative declarative]
I go-EXP.PERF Beijing
'I have been to Beijing.'

Korean, in contrast, instantiates experientials outside the aspectual system and expresses experiential meaning through existential constructions involving a complex DP, as shown in (11):

(11) Na-nun [Seoul-ul po-n] cek-i eps-ta/iss-ta.
I-TOP Seoul-ACC see-ADN experience-NOM not.exist-DE/exist-DE
[literal] 'There (doesn't) exist an experience of seeing Seoul to me.'
'I have never seen Seoul.'

The nominal *cek* ('experience') is preceded by an adnominal clause that specifies the nature of the experience. This complex DP functions as the subject of the existential verb. Therefore, Korean employs a structure that differs significantly from both English and Chinese. Based on the differences, Grillo et al. investigate the impact of L1 on L2 knowledge of English experientials. They use the FRH as the model for L1 transfer, hypothesizing that the L1 Chinese group will map from *guo* to *ever* (also see the indirect evidence for this mapping in (12) from Singaporean English). Their acquisition task then involves reconfiguring features from the non-polarity sensitive *guo* to the polarity-sensitive *ever*. In contrast, since Korean utilizes a fundamentally different structure from English and Chinese and lacks any clear mapping relation with English, the L1 Korean group serves as a control group. It is predicted that the L1 Korean group will not align with the L1 Chinese group, if L1 effects are present.

2 The experiment and results

Their experiment employed a $2 \times 2 \times 2$ Latin-square design, examining grammaticality (+gram, −gram), NPI type (*ever* vs. *any*), and definiteness (+definite, −definite). Grammaticality pertains to licensed and unlicensed sentences with NPIs, which were tested using the two types, *ever* and *any*. Definiteness relates to the interpretation of test sentences featuring *ever* and *any*. Grillo et al. extensively argue that experientials hold a universal reading of *kind* across different languages, and they investigate whether the L1 Chinese group can grasp this target interpretation despite the different experiential markers in Chinese and English. In the current article, we will only report the results from the first two conditions (grammaticality and NPI types) and will not address definiteness.[17] Below is a sample of their experiment stimuli.

They employed an acceptability judgement task using self-paced reading, where participants pressed the spacebar to reveal portions of the sentence until the end of each sentence. After reading, they provided their judgment on the acceptability of a given sentence. The stimuli consisted of 48 target sentences (as shown in Table 4) and 64 filler sentences, which were balanced between grammatical and ungrammatical sentences.

The participants comprised 72 L1 Chinese-speaking learners, 83 L1 Korean-speaking learners, and 70 L1 speakers of English who served as the L1 control group. The English proficiency of all L2 participants was measured using the Oxford Quick Placement Test (Oxford University Press et al., 2001). The proficiency results showed no significant differences between the two learner groups.

At first glance, the results from the L2 groups (L1 Chinese and L1 Korean) appear quite similar to one another; see Figure 2. Within the categories of *ever* and *any*, the L1 English control group showed a nearly categorical distinction between grammatical (dark grey) and ungrammatical (light grey) conditions. In the grammatical condition for *ever*, a difference is observed between the [–def] (solid bar) and [+def] (lined bar) conditions: the L1 English control group generally accepts the [–def] condition but shows only 50% acceptance for the [+def] condition. As noted earlier, we will not address the [±def] conditions for the L2 groups in the current article, and instead consider them collectively, as indicated by the horizontal lines above the bars in the L2 group results.

Table 4. Example of experiment stimuli.

	Licensed	Unlicensed
ever	*Meg hasn't ever eaten (the) figs*	*Meg has ever eaten (the) figs*
any	*Meg hasn't ever eaten any (of the) figs*	*Meg has ever eaten any (of the) figs*

Source. Modified from Grillo et al. (2022, under revision): table 1.

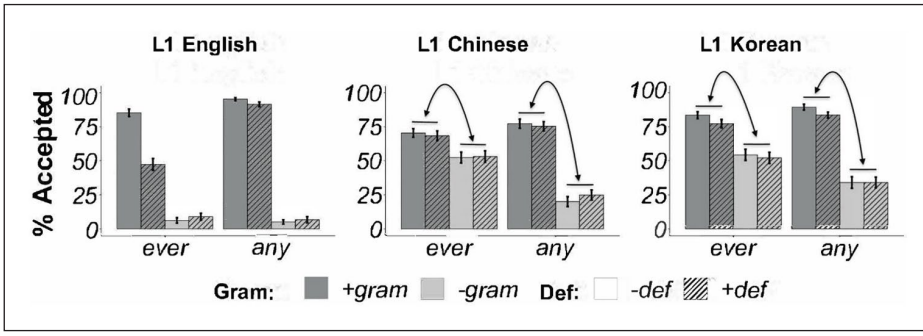

Figure 2. Mean rates of 'acceptance' responses.
Notes. def = definiteness; gram = grammaticality.
Source. Modified from Grillo et al. (2022, under revision): figure 3.

Grillo et al. (2022) employed Bayesian mixed effects regression models using Grammaticality, NPI type, and definiteness as dependent variables. For the L2 groups, the effect of Grammaticality varied by NPI type. As indicated by the curved arrows, the patterns between the ±grammatical conditions showed a very similar trend across the two L2 groups: 'judgements were starker for the NPI *any* than they were for the NPI *ever*' (Grillo et al., 2022: 16). This suggests that both L2 groups were better at discerning the grammaticality with *any* better than with *ever*.

However, the results across proficiency levels show very different shapes between the two groups, once the proficiency is considered, as shown in Figure 3.[18] First, regarding *any*, at the lower proficiency level (towards the left of each graph), the two L1 groups exhibit a significant divergence. However, at the higher proficiency (towards the right of each graph), both groups demonstrate similar performance in discerning the grammaticality of *any*, effectively distinguishing grammatical from ungrammatical sentences, indicating accurate judgement. Notably, Chinese has a similar NPI, *renhe*, which shares the same polarity-sensitive distribution,[19] while Korean lacks an NPI comparable to *any*. These acquisition patterns observed for *any* are not generalized to other NPIs, such as *ever*.

For *ever*, the results reveal a stark contrast: the two L1 groups exhibit very different acquisition trajectories across all proficiency levels. At the higher proficiency level, the L1 Chinese group tends to accept both grammatical and ungrammatical instances of *ever*. This pattern is distinct from the L1 Korean group, who

successfully discern the grammaticality of *ever* at the same proficiency level. Thus, at the most advanced proficiency level in the study, the Chinese L1 group shows no indication of the target knowledge of *ever*, lagging behind the L1 Korean group in their development. Turning to the lower proficiency groups, these two groups display opposite patterns: the L1 Chinese group initially rejects both grammatical and ungrammatical instances of *ever*. In contrast, the L1 Korean group starts by accepting them. Consequently, across all proficiency levels, the two learner groups follow markedly different acquisition trajectories. The L1 Chinese group, in particular, shows strong evidence that they do not treat *ever* as an NPI, as they accept it in both grammatical and ungrammatical contexts. Grillo et al. use this finding to support the mapping between *guo* and *ever*, referencing well-attested Singaporean English, an English-based creole influenced by Chinese, which allows *ever* to function as non-NPI (Ho and Wong, 2001; Ziegeler, 2011, cited in Grillo et al. (2022, under revision). Grillo et al. also provide this as indirect evidence for the mapping between *ever* and *guo*:

(12) Q: You ever visit York or not? 'Have you ever visited York?'
A: Yes, I ever visit York. 'Yes, I have visited York before.'
(Grillo et al., 2022, under revision)

3 Implications for microvariation and acquisition tasks

The study by Grillo et al. offers important insights into typology and acquisition tasks. It is based on an extensive cross-linguistic survey of experiential constructions, identifying three main types of experiential constructions (Gil et al., 2021a):

(13) Typology of the experiential
a. Aspect
(i) Perfect (Italian, English, etc.)
(ii) Imperfective (Slavic, etc.)
(iii) Iterative (Finno-Ugric, etc.)
(iv) Experiential perfect (Chinese, etc.)
b. Existential construction (Japanese, Korean, Udmurt)
c. Serial verb construction (Papuan, Austronesian)
(modified from Gil et al., 2021a)

English and Chinese belong to the same typological group (13a), where experientials are instantiated within the aspectual system, albeit in different ways: English uses the perfect aspect, while Chinese employs a dedicated experiential aspectual marker. In contrast, Korean belongs to a different typological group (13b) using an experiential construction.

This typological distance between Chinese and Korean in relation to English presents different acquisition tasks. Let us consider those specific to the L1 Chinese group as outlined in (14).

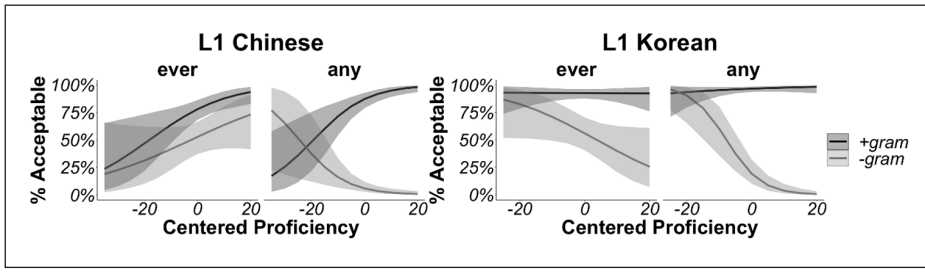

Figure 3. The grammaticality × NPI × proficiency interaction for L1-Chinese and L1-Korean L2-English speakers.
Note. gram = grammaticality; NPI = negative polarity item.
Source. From Grillo et al., 2022: figure 5.

(14) L1 Chinese → L1- Chinese–L2-English interlanguage → L2 English
Guo_{-NPI} $ever_{-NPI}$ → $ever_{-NPI} \rightarrow +_{NPI.}$ $ever+_{NPI}$
[mapping] [feature reassembly]

First, let us call the feature responsible for polarity sensitivity, [±NPI].[20] For the L1 Chinese group, when exposed to English experientials, they project an equivalence between L1 Chinese and L2 English experientials within the aspectual system. If a mapping is established between English *ever* and Chinese *guo*, the interlanguage forms a lexical entry for *ever* that mirrors the feature of the L1 equivalent *guo*, shown as $ever_{-NPI}$ in (14). This interlanguage lexeme then undergoes feature reassembly, which involves a change in feature from –NPI to +NPI. In other words, their acquisition task requires the restructuring of the interlanguage grammar. This process, however, does not apply to the L1 Korean group. In Korean, the periphrastic experiential construction (formed through existential constructions) does not provide a morpheme that directly maps to *ever*, meaning the L1 Korean group proceeds with acquisition without any direct mapping possibilities. Furthermore, the L1 Korean group must relocate their L1-based experiential system from the existential construction into the aspectual domain, developing experientials in a structural space, which is different from their L1.

When comparing these two different acquisition tasks, one might expect that the latter task – developing a property in a different syntactic space (as required by the L1 Korean group) – would be more challenging than the former task of restructuring via feature reassembly (faced by the L1 Chinese group). However, this is not what we witness in the results of the study. As shown in Figure 3, it is the L1 Korean group that exhibits a more on-target attainment pattern at the higher proficiency level, in contrast to the L1 Chinese group. Not only do we observe differences in attainment at the higher proficiency level, but the acquisition paths across the proficiency levels appear fundamentally different. Combined with the findings from the studies so far, they consistently suggest that restructuring via feature reassembly within microvariation poses a greater challenge in L2 acquisition.

V Discussion: A larger perspective

To recap, the two studies discussed above present two types of contexts based on the typological relationship between L1s and L2s, as outlined in (15).

(15) i. L1s that are typologically close to L2 properties (microvariation)
ii. L1s that are typologically distant from L2 properties (microvariation)

In these contexts, one consistent observation emerges: typological similarities do not appear to facilitate L2 acquisition. Learners whose L1s are typologically distant from L2 (15ii) outperform those whose L1s are typologically closer to L2 (15i). For ease of reference, we will call this the 'advantage for (15ii) over (15i)'. A similar observation has also been reported by Hu and Liu (2007).

Hu and Liu (2007) compare Korean-speaking and English-speaking learners of L2 Chinese in their use of restrictive relative clauses (RRCs). They examine the typological relationships between the three languages (L1 Korean, L1 English and L2 Chinese) based on RRC-associated properties such as (a) head-directionality (head-initial vs. head-final), (b) the availability of the complementizer and (c) the use of resumptive pronouns. They propose that Korean is typologically closer to L2 Chinese (as in 15i) and English is more distant from L2 Chinese (as in 15ii). This led to a prediction that the typological similarity between Chinese and Korean would facilitate L2 acquisition of Chinese RRCs for the L1 Korean group, allowing them to outperform the L1 English group. The learners were tested using a written grammaticality judgement task across all three types of properties (a–c). Contrary to their prediction, the results showed that, in all test properties of RRCs, the L1 English group outperformed the L1 Korean group. Their findings align with the results of the two sets of studies presented in this article, supporting an advantage for (15ii) over (15i).

Interestingly, similar findings date back more than five decades to the seminal work by Schachter (1974). Like Hu and Liu (2007), Schachter tests L2 knowledge of RRCs, but with different L1 and L2 pairings: L1 Persian, L1 Arabic, L1 Japanese, and L1 Chinese, with L2 English. This makes Schachter's study an almost bi-directional counterpart of Hu and Liu's work. While Schachter (1974) did not explicitly address typological distance, she also investigated the L1 effect by testing the predictions from contrastive and error analysis hypotheses. Though Schatcher used free writing samples instead of an elicitation task, her study considers a set of associated properties of RRCs similar to Hu and Liu's study, making the results comparable. The four L1s in Schachter's study can be divided into two typological groups in terms of RRCs: L1 Persian/L1 Arabic, which are typologically close to L2 English (15i), and L1 Japanese/L1 Chinese, which are typologically distant from L2 English (15ii). The results showed higher error rates in the former group (15i) than in the latter (15ii), once again highlighting the advantage of (15ii) over (15i).[21]

In addition to these consistent findings, however, I propose that the observed advantage or facilitation should not be directly attributed to typological distance alone. Instead, the nature of acquisition tasks is at the core of predicting the development of L2 knowledge. The studies presented in this article compare two typologically distinct L1s with respect to L2s, and each case involves a common acquisition as shown in (16).

(16) i. L1s that are typologically close but with a microvariation to L2 properties
→ acquisition task of restructuring
ii. L1s that are typologically distant from L2 properties
→ acquisition task of development

The L1/L2 pairs (16i), which feature microvariation among typologically close languages, involve an acquisition task centred on restructuring through feature reassembly. This is exemplified by Japanese learners of L2 Korean bare WH and Chinese learners of L2 English experientials in the two sets of studies we have discussed. Conversely, the L1/L2 pairs (16ii), which involve typologically distant languages, require the development of a new morphosyntactic item or structure not present in the L1. This applies to English learners of L2 Korean bare WH and Korean learners of L2 English experientials. The results from both sets of studies consistently show that the learner groups in (16i) are outperformed by the learner groups in (16ii). While this does not confirm whether a specific L2 knowledge in (16i) is ultimately acquired, since the studies do not test ultimate attainment, it suggests that L2 acquisition in the context of (16i) is more challenging than that in (16ii) at the same proficiency level. Additionally, Grillo et al. found that these two acquisition contexts generate very different acquisition trajectories. We argue that it is these distinct acquisition tasks (restructuring vs. development) that predict the varying performance of different L1 groups, rather than the typological distance itself.

The above also has further implications for L2 acquisition processes within the Feature Reassembly Hypothesis (FRH, Lardiere, 2009). The acquisition tasks outlined in (15) can be mapped onto relevant acquisition processes in the FRH as follows:

(17) i. L1s that are typologically close but with a microvariation to L2 properties
→ acquisition task of restructuring: *Feature Reassembly*
ii. L1s that are typologically distant from L2 properties
→ acquisition task of development: *Feature Selection*

When discussing acquisition tasks, we highlighted that restructuring tasks involve feature reassembly (17i). In this process, L2 learners reconfigure features of the L1–L2 interlanguage, triggered by L2 input that conflicts with the existing interlanguage grammar. Conversely, the acquisition process in the second context (17ii) involves feature selection. In the absence of direct mapping relations for a particular L2 property, L2 learners must assemble features from the feature inventory of Universal Grammar, selecting those that match and are appropriate for the L2 property. Between these acquisition processes in (17i) and (17ii), the results in both studies suggest that the feature reassembly (16i) is more challenging than the feature selection (17ii). However, these processes within the FRH are yet to be fully tested, as most studies to date compare 'feature reassembly' and 'no feature reassembly'. Some of such studies include Gil and Marsden (2013), Slabakova (2009) and Cho and Slabakova (2014). For example, Cho and Slabakova (2014) offer one of the most fine-grained schemata for measuring the degree of acquisition difficulties within the FRH model. They investigate L2 knowledge of Russian (which lacks an article system) by L1 Korean learners and L1 English learners and propose a cline of acquisition difficulty.

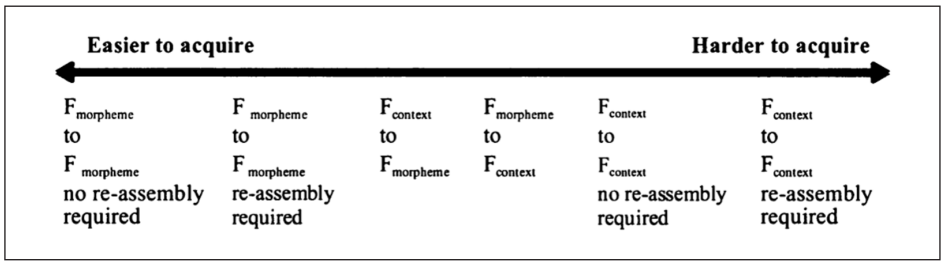

Figure 4. Cline of difficulty in functional feature acquisition in various learning situations.
Source. From Cho and Slabakova, 2014: figure 1, p. 166.

Figure 4 considers various mapping possibilities, e.g. the second left on the cline, which represents L2 properties that require feature reassembly between features encoded in overt morphemes in both L1 and L2 (corresponding to the context (17i). However, the context of (17ii), where no direct mapping exists between L1 and L2 and feature selection is required, is not yet represented (appropriately so for the given test property in Cho and Slabakova). The results from the two sets of studies discussed in this article suggest that the context (17ii) should be positioned toward the leftmost end of the cline, indicating that it is easier than $F_{morpheme}$-to-$F_{morpheme}$ with reassembly required (17i). This highlights the need for a more extended and finely tuned spectrum for predicting the degree of difficulty in L2 acquisition, reflecting the complexity of L2 development. This complexity arises not only from the nature of different L2 target properties but also from their relationship to various L1s under investigation.

Lastly, the current article concerns L2 with only one prior language (L1) and, thus, has very little say about the language source of transfer, one of the main questions addressed in current L3 models. Nonetheless, it raises an interesting issue that L3 models can address regarding acquisition tasks and microvariation. For instance, in the Linguistic Proximity Model (LPM, Westergaard et al., 2017), the language transfer takes place via linguistic similarities either from L1 or L2. Hence, L3 interlanguage will take its shape much from linguistic similarities. This means that the interlanguage will undergo a series of restructuring. If a property in one of the two prior languages is similar and thus transfers to L3, but if it is not identical but shows subtle differences under microvariation, then the restructuring in this case faces a challenge. Similarly, in the Typological Primacy Model (TPM, Rothman, 2013, 2015), assuming a wholesale transfer from one of the two prior languages typologically close, there is an even broader scope of microvariation and restructuring. At the same time, it would be interesting to compare those restructuring cases with how the L3 knowledge develops for a target property that does not have an equivalent in the typologically close prior language, hence creating new items or structures. In this manner, microvariation (and the lack of it) and acquisition tasks can provide a new dimension of questions for L3 studies.

VI Conclusions

We have shown that typological closeness does not facilitate L2 acquisition; in fact, it may hinder it, in contrast to typological distance. We have shown this using the results brought

together from the two sets of independent studies. The key factor in L2 development lies in the nature of the acquisition tasks – restructuring vs. development – rather than the typological distance between L1 and L2. While typological distance is associated with acquisition tasks, it is not the determining factor for L2 development. The two acquisition tasks we have considered arise from specific L1 and L2 relationships. The first involves the L1–L2 pair that are typologically close yet the property in question is similar but not identical; hence, it is subject to microvariation. The second involves an L1 and L2 pair of languages that are typologically unrelated, with no direct mapping in L1 and L2 morphemes, or the target property is encoded in a different part of grammar. These two cases represent only a part of a broader spectrum of crosslinguistic variation, where typological (and linguistic) distances form a continuum, rather than a strict dichotomy of typological closeness vs. distance. For instance, linguistic properties subject to microvariation could also be compared with those involving more substantial variation. This could lead to the identification of a new set of acquisition tasks that extend beyond what has been presented and our current understanding of L2 development.

Our exploration of typological distance in this article contrasts with a substantial body of L2 acquisition research, which often suggests that learners whose L1 is similar to the L2 have an advantage. Many existing studies, however, do not always consider the specific type and nature of typological distance between L1 and L2. Typological distance may offer a new perspective for interpreting crosslinguistic influence on L2 acquisition. At the same time, crosslinguistic comparisons with respect to a given L2 target property should also take into account other associated properties. For example, in Gil et al. (2021b) and Gil and Marsden (2025), we observed that while L2 Korean WH differs from Japanese in how they are bound by an operator – either locally within the DP or over long-distance to the CP – the operator binding of WH is an associated property of wh-in-situ, which groups Korean and Japanese together. Similarly, in Grillo et al. (2022, under revision), we have seen that the key difference between English/Chinese and Korean is where experiential expressions are encoded: the aspectual system for English and Chinese and existential constructions for Korean. Thus, the challenge faced by L1 Japanese learners of L2 Korean bare WH, and by L1 Chinese learners of L2 English experientials, is not solely due to the specific target properties in question. These difficulties can also stem from associated linguistic properties that L1 and L2 languages share or in which they differ. For instance, in the Korean wh-indefinites study, properties such as wh-in-situ and quantified nominal structures may affect the acquisition of wh-indefinites in Korean. Similarly, similarities and differences in TAM systems may be linked to the acquisition of English experientials. Further research is needed to understand how L2 acquisition of such specific properties relates to other associated linguistic properties and their typological distance. In addition, when languages share broader structural similarities, such close affinity may overshadow microvariation between them. This may, in turn, create resistance to the restructuring of properties subject to microvariation. For instance, both Japanese and Korean have complex wh-composites whereby wh-morphemes combine with different quantificational particles to create existential and universal quantifiers. For L1 Japanese learners of Korean, this close similarity becomes deeply embedded in their interlanguage, thereby delaying the grammatical restructuring necessary to allow bare wh-words in L2 Korean as existential quantifiers.

Admittedly, the studies reported in this article do not directly aim to test typological distances and acquisition tasks; thus, the proposal put forward here requires independent testing. One immediate way to move forward would be to conduct a bidirectional experiment of the studies presented in this article. For instance, the follow-up study could test against L2 Japanese wh-indefinites by L1 Korean and L1 English learners (building on the study on L2 wh-indefinites), as well as L2 Chinese experientials by L1 Korean and L1 English learners (building on the study on L2 experientials). The relations between these pairs of languages will remain constant in terms of typological distance and acquisition tasks. If the proposal in this article is correct, we would expect the same findings to hold, thereby supporting the claim that restructuring within microvariation poses a greater challenge than development within macrovariation

Declaration of conflicting interests

The author declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author received no financial support for the research, authorship, and/or publication of this article.

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Notes

1. This term refers to 'indefinite expressions that are morphologically related to wh-interrogatives' (Bruening, 2007; Yun, 2013: 20). The same phenomenon is also referred as 'indefinite pronouns' (Haspelmath, 1997) and 'wh-interminates' (Hwang, 2019).
2. For a full paradigm of complex WH_{Ind} in Korean (and Japanese), see Gill, 2004; for a crosslinguistic analysis for complex WH_{Ind}, see Yun, 2014.
3. Japanese WH can also be separated from *ka* (long-distance) in declarative sentences and can function as an existential quantifier:

   ? [[Dare-o hihansita] gakusei]-KA-ga taihosareta.
   [Ind-ACC criticized] student-ka-NOM were.arrested
   'A/the student or other who had criticized someone was arrested.' (Yatsushiro, 2009: (5a), p. 143

   For further details on local and long-distance licensing of WH_{Ind}, see Kratzer and Shimoyama, 2017; Unegaki, 2018; Yatsushiro, 2009.
4. More recently, Hiraiwa and Nakanishi (2020) provide a different account for Japanese WH_{Ind} and argue that Japanese also allows 'bare indeterminates' licensed by a covert *Q*-operator. Even adopting this approach, our assumption on the microvariation between Japanese and Korean still remains as licensing WH_{Ind} between Korean and Japanese are subject to different conditions.
5. These proficiency levels are only indicative of the fact that the learners are not at the beginner level, and are used to differentiate the proficiency across the groups. There is no mention that they correspond to any levels by standardized proficiency tests or the CEFR levels.

6. This task also included 30 distractor sentences.
7. The design and test sentences in the translation task were adopted from that of Choi (2009).
8. This task also contained 5 distractor sentences.
9. For a more complete comparison across Korean, English and Japanese in intonation contours in question sentences, see Gil et al., 2021b.
10. The results reported in Gil et al. (2021b) also include the Chinese L1 group, as Chinese features wh-indefinites, making it typologically close to Korean. For this reason, the statistical analysis combines the L1 Japanese and L1 Chinese groups together and compares them with the L1 English group. The results show a significant difference between the L1 Japanese/Chinese group and the L1 English group. However, our discussion focuses only on the L1 group result, which was significantly different from the L1 English group. Since the Chinese group author 2021 performed better than the L1 Japanese group, we infer that the difference between the L1 Japanese and L1 English groups is likely even more pronounced.
11. For an overview on subtle syntactic and semantic differences in Korean, Japanese and Chinese WH-indefinites, see Yun, 2018.
12. We leave it an open question as to the nature of the (micro)-parameter that captures this microvariation between Japanese and Korean, that is, the difference in the variable binding domain (DP vs. CP).
13. English WH can be also used for other syntactic constructions such as relative clauses. In this article we only focus on the use of WH as a wh-interrogative morpheme.
14. For a detailed illustration of this mapping possibility, see Gil and Marsden, 2025.
15. For a detailed discussion of the feature make-up for English WH, see Choi, 2009.
16. Both *some* and Korean WH are a positive polarity item and thus share the same distribution and interpretation.
17. Grillo et al. (2022, under revision) also test a hypothesis based on incremental processing, which details we do not concern in the current article.
18. The centered proficiency scores were calculated by subtracting each individual participants' score (out of 60) from the cross-participant average. The average is represented by 0 in Fig. 5. (p. 14, Grillo et al., under revision)
19. Chinese also has another lexical item that corresponds to *any*: bare WH-indefinites. Their distribution, however, do not completely align with that of *any*. For the full comparison between *renhe* / bare WH-indefinite Chinese and *any* in English in the context of L2 acquisition, see Gil et al., 2021b.
20. At this point, we leave the nature of the formal feature responsible for polarity sensitive distribution somewhat vague. There have been attempts to formalize this feature as [±Pol]; for further details, see Tanaka and Tsoulas, 2006.
21. Testing predictions from the contrastive and error analyses, Schatcher (1974) explained the results through 'avoidance'. She observed that the L1 Japanese and Chinese groups made fewer errors compared to their L1 Persian and Arabic counterparts. Schatcher suggested that because Japanese and Chinese RRCs are more different from English, learners were more likely to avoid using English RRCs altogether. When they did attempt to use them, they were more cautious and attentive, leading to fewer errors.

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